

What is claimed is:

1. A dryer for a printer such as a wallpaper printer, the dryer comprising:

a compartment with a top opening for receiving a media web fed from the printer;

5 a source of heated air located above the top opening for blowing heated air into the opening to dry printing on the media web.

2. A dryer as claimed in claim 1, wherein:

the door covers the entire opening and acts to support the web when the door is closed.

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3. A dryer as claimed in claim 1, wherein:

the door pivots along an axis transverse to the path to reveal the opening.

4. A dryer as claimed in claim 1, wherein:

15 the door is operated by a motor that operates a spool;  
the spool winding and releasing a cord which operates the door.

5. A dryer as claimed in claim 1, further comprising:

a preheater in the path but located before the opening.

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6. A dryer as claimed in claim 5, wherein:

the preheater is in the same plane as the door.

7. A dryer as claimed in claim 1, wherein:

25 the source of heated air comprises a blower which feeds a stream of air into a plenum.

8. A dryer as claimed in claim 7, further comprising:

a temperature sensor in the plenum.

30 9. A dryer as claimed in claim 1, wherein:

the compartment is adapted to receive the web as a suspended partial loop.

10. A dryer as claimed in claim 1, wherein:

the compartment has an air vent which supplies a recirculation duct.

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11. A dryer as claimed in claim 10, wherein:

the recirculation duct extends from the compartment to an intake of an air supply that feeds the compartment.

12. A dryer as claimed in claim 11, wherein:

10 the recirculation duct is a tube which extends upwardly from the compartment and includes an exhaust vent at an upper extremity.

13. A dryer as claimed in claim 7, wherein:

the source of heated air further comprises a second blower which feeds a stream of air into the plenum.

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14. A dryer as claimed in claim 7, wherein:

the plenum has a heating element within it.

15. A dryer as claimed in claim 1, wherein:

20 the compartment has two vents, each one supplying vented air to a separate recirculation duct, the ducts located on opposite sides of the compartment, each duct supplying recirculated air to a source of heated air.

16. A dryer as claimed in claim 15, wherein:

the source of heated air is a pair of blowers which direct air into a plenum.

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17. A dryer as claimed in claim 16, wherein:

the blowers are located above the plenum.

18. A dryer as claimed in claim 7, wherein:

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the dryer is located within an on-demand wallpaper printer and is controlled by a processor within the printer.

19. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web such that the media is printed by the printhead at a rate exceeding 0.02 square meters per second (775 square feet per hour).

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20. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web such that the media is printed by the printhead at a rate exceeding 0.1 square meters per second (3875 square feet per hour).

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21. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web such that the media is printed by the printhead at a rate exceeding 0.2 square meters per second (7750 square feet per hour).

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22. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead has more than 7680 nozzles.

23. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead has more than 20,000 nozzles.

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24. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead has more than 100,000 nozzles.

25. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead has more than 250,000 nozzles.

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26. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead prints ink drops with a volume of less than 5 picoliters.

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27. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead prints ink drops with a volume of less than 3 picoliters.

28. A dryer as claimed in claim 1 wherein the printer has a full width digital color printhead located in the path followed by the web and the printhead prints ink drops with a volume of less than 1.5 picoliters.

29. A dryer as claimed in claim 1 wherein the printer is a self contained printer for producing rolls of  
5 wallpaper, comprising:

a cabinet in which is located a media path which extends from a media cartridge loading area to a winding area;

a full width digital color printhead located in the media path;

10 a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

30. A dryer as claimed in claim 1 wherein the printer uses a media cartridge, comprising:

a case in which a roll of blank media may be deployed;

15 the case having two halves, hinged together, an area between the two halves, when closed, defining a media supply slot; and

the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.

20 31. A dryer as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper for carrying in a consumer tote, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings; and

the tote having an interior in which is located a disposable core which is aligned with the access openings.

25 32. A dryer as claimed in claim 1 wherein the printer has a transverse cutter, the transverse cutter comprising: a chassis having end plates;

the end plates being separated to allow a web of media to pass between them;

the end plates supporting between them a cutting blade; and

30 the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web.

33. A dryer as claimed in claim 1 wherein the printer has a slitting mechanism, the slitting mechanism comprising:

a chassis having end plates;

5 the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them;

one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitte r having a cutting edge; and

the slitting mechanism selectively engageable to either enter or not enter a path followed by the web

10 according to an input provided by an operator of the printer.

34. A dryer as claimed in claim 1 wherein the printer comprises:

a cabinet in which is located a media path which extends from a media loading area to a winding area;

a printhead located in the media path;

15 a processor which accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein,

the length and design of the roll are determined by the operator inputs.

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35. A dryer as claimed in claim 1 wherein the printer prints wallpaper onto a web of media using a method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a winding area, there being a printhead located in the media path, a processor which

25 accepts operator inputs from one or more input devices;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification for an operator's requirements;

using the processor to operatively control the printer according to the data; and

printing a single roll of wallpaper, on demand, according to a selected pattern.

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36. A dryer as claimed in claim 1 wherein the printer is used in a method for operating a wallpaper printing business, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

5 using one or more printer input devices which communicate with a processor to capture data regarding one or more customer's requirements;

the data comprising at least a customer selected pattern;

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and charging a customer for the roll.

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37. A dryer as claimed in claim 1 wherein the printer is used in a method for operating a wallpaper printing franchise, the method comprising the steps of:

providing to franchisees, an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;

15 the printer having one or more printer input devices which communicate with a processor to capture data regarding one or more customer requirements, the data comprising at least a customer selected pattern; providing the franchisee with a collection of patterns in a digital storage medium that can be read by the printer;

enabling the franchisee to print a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and

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obtaining or attempting to obtain a fee from the franchisee.

38. A dryer as claimed in claim 1 wherein the printer comprises:

a frame in which is located a media path which extends from a media loading area to a winding area;

25 a printhead located across the media path;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll; and

the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer.

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39. A dryer as claimed in claim 1 wherein the printer prints wallpaper onto a web of media using a method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path, there being a full width printhead located across the media path, there being a processor which accepts operator inputs from one or

5 more input devices and which controls the printer;

using one or more input devices which communicate with the processor to capture data from an operator regarding a specification;

running the printer according to the data;

printing a single roll of wallpaper, on demand, according to a selected pattern and configuration;

10 changing the pattern according to a new datum from an operator; and

then printing a new roll onto the same web.

40. A dryer as claimed in claim 1 adapted for drying a moving web of media in a printer such as a wallpaper printer using a method comprising the steps of:

15 loading the web in a path that traverses a compartment in a dryer within the printer, the compartment having an opening across the top;

allowing the moving web to descend into the compartment, as required; and

blowing heated air from above the opening.

20 41. A dryer as claimed in claim 1 wherein the printer is adapted to be supplied with a media web via a method comprising the steps of:

opening a reusable case;

placing into the case a core onto which has been located a supply roll of blank wallpaper media;

supporting the core for rotation within the case;

25 leading a free edge of the roll between a pair of rollers and past an edge of the open case; then

with the rollers located within the case and on either side of the web, closing the case and loading it into a printer.

30 42. A dryer as claimed in claim 1 wherein the printer has a printhead assembly which prints onto a moving web that follows a path, the assembly comprising:

a full width printhead located across the path;

the printhead comprising a color printhead which is at least as wide as the web;

the printhead being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.

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43. A dryer as claimed in claim 1 wherein the printer comprises:

a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot;

a multi-color roll width removable printhead located in the housing and across the media path;

the printhead being supplied by separate ink reservoirs, the reservoirs connected to the printhead by an ink

10 supply harness, there being a disconnect coupling between the reservoirs and the printhead;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll.

15 44. A dryer as claimed in claim 1 wherein the printer is adapted to produce rolls of wallpaper for carrying in a consumer tote, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings;

the tote having an interior in which is located a disposable core which is aligned with the access openings;

both openings exposing a moulded coupling, one coupling attached to each end of the core, at least one of the  
20 couplings being a driven coupling and adapted to engage a driving spindle that rotates the core.

45. A dryer as claimed in claim 1 wherein the printer has a removable printhead assembly which prints onto a moving web, the assembly comprising:

a full width stationary printhead located on a rail along which it slides for service and removal;

25 a number of replaceable ink reservoirs which supply the printhead with different inks;

the printhead comprising a color printhead which is at least as wide as the web; and

the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed.

30 46. A dryer as claimed in claim 1 wherein the printer is a self threading printer comprising:



a media loading area adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide;

a cabinet housing a media path which extends from the pilot guide to a printed media dispensing slot;

a printhead located across the media path;

5 a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;

a motor within the cabinet for advancing a media web out of the media cartridge; and

one or more other motors adapted to urge the media along the path and out of the slot.

10 47. A dryer as claimed in claim 1 wherein the printer is adapted to produce wallpaper on-demand via a method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which passes a printhead on the way to a dispensing slot;

selecting a pattern and a configuration;

15 using one or more printer input devices which communicate with a processor to input the pattern and the configuration; and

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration.

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